

MEMORANDUM

4 April 2000

TO: Lompoc Interagency Work Group Members (See Attached Distribution List)

SUBJECT: MEETING SUMMARY – NOVEMBER 8, 1999
(REVISED. THIS VERSION REPLACES ANY EARLIER VERSIONS.)

Members present: Advocates for a Clean Environment – Deb Robinson; Air Resources Board - Lynn Baker; Celite Corporation - Chris Pauley; City of Lompoc - Dick DeWees, Stacy Lawson; Department of Health Services – Martha Harnly; Department of Pesticide Regulation – Madeline Brattesani, Paul Gosselin, Paul Helliker, Lisa Ross, John Sanders, Jim Sanborn, Randy Segawa, Pam Wofford; Lompoc Growers - Richard Quandt; Lompoc community members-at-large - Joyce Howerton, Dave Pierce; Office of Environmental Health Hazard Assessment - Richard Ames, Joy Wisniewski; Santa Barbara County Agricultural Commissioner's Office - Joe Karl; Santa Barbara County Air Pollution Control District - Duane Sikorski; Santa Barbara County Health Care Services - Elliott Schulman; Santa Barbara County Supervisor Gray's Office - Susan Warnstrom; Santa Barbara County Supervisor Marshall's Office - John Buttny; Senator O'Connell's Office - Carla Frisk; UC Extension Agricultural Engineer – Bill Steinke; U.S. Environmental Protection Agency (EPA), Headquarters - Jake Mackenzie (Facilitator, Lompoc Interagency Work Group); U.S. EPA, Region IX - Ray Chavira, Karen Heisler; Volunteers for a Healthy Valley - George Rauh.

Members absent: Assemblyman Maldonado's Office – Melanie Bedwell; Department of Health Services – Christine Arnesen, Rick Kreutzer, Sharon Seidel; Department of Pesticide Regulation – Jay Schreider; Office of Environmental Health Hazard Assessment – Michael DiBartolomeis, Anna Fan; Volunteer - Robert Holtzer.

TOPIC #1: Brief opening remarks. Paul Helliker, DPR Director, spoke to the Lompoc Interagency Work Group (LIWG). On behalf of Winston Hickox, Secretary of the California EPA, Paul expressed the Secretary's regrets at being unable to attend this meeting due to an illness in the family.

Paul Helliker reaffirmed that both California EPA and DPR are committed to getting answers to the concerns of the community. Paul mentioned his weekend tour of some coastal communities, hosted by Californians for Pesticide Reform. He urged the LIWG to move forward to make the final decisions about Phase Two/fumigant and Phase Two/other pesticides monitoring projects. The money exists to conduct the pesticide air monitoring. If DPR does find pesticide air concentrations higher than acceptable levels, then DPR will take action to reduce those levels and to protect human health.

TOPIC #2: Unscheduled public appearances. The Lompoc Interagency Work Group (LIWG) opened the meeting to unscheduled public appearances. Several people from the audience spoke as follows.

Dulcie Sinn/Lompoc resident, part-time employee of the City of Lompoc, asked that all data gathered be validated. She also noted the importance of testing for radon in homes and reducing household use of pesticides. She stated that it is important to know what may be causing disease in the Lompoc Valley in order to alleviate fear, and to protect children in our schools and the health of valley residents.

Lauren Sullivan, Advocates for a Clean Environment, noted that, as a LIWG member for last several years, she

sees a need for a change in name and philosophy from the Department of Pesticide Regulation to the Department of Pest Management. This would require a refocusing of the department's direction toward pest control using a variety of methods.

Mary Jacka/CRLA, farm worker community, urged the LIWG not to forget about worker exposure to pesticides and consider the need to increase worker protection and enforcement of worker safety laws.

Susan Kegley, Pesticide Action Network: As we start to think about Phase Two/other pesticides, consider conducting multi-pesticide sampling. She encouraged LIWG to consult others who have done such sampling (handouts #1 and #2).

Andra Spanne Rauh requested that the LIWG take a more in-depth look at childhood cancers in Lompoc.

TOPIC #3: Approve September 10 meeting summary. The LIWG approved the summary with the understanding that the wording under Topic #5/Progress report on funding/Main points, second sentence, be clarified to indicate monetary shortfalls for identified projects.

TOPIC #4: Review agenda. The LIWG agreed to add Item #5, adding new members, and Item #6, a question about the Lompoc Record article on the community meeting in Lompoc (part of the tour of Californians for Pesticide Reform). Item #7 becomes status of funding requests, Item #8 becomes Key Issue #1 status report, Item #9 becomes Key Issue #3 status report, Item #10 becomes Key Issue #2 status report, and Item #11 becomes next meeting date, time, location and agenda.

TOPIC #5: New members. Due to work commitments, Lauren Sullivan, Advocates for a Clean Environment, is no longer able to continue as a LIWG member; therefore, she proposed Deb Robinson replace her on the LIWG. The LIWG gave Lauren a round of applause to thank her for her hard work on the LIWG.

Assemblyman Maldonado (via a letter to the LIWG, handout #3) proposed Steve Jordan/Farm Bureau for membership to the LIWG.

ACTION: The LIWG accepted these new members, clarifying that Steve Jordan would be representing the farmers' interests rather than representing Assemblyman Maldonado's office.

TOPIC #6: Request to clarify newspaper article statement. Dave Pierce asked a question about Paul Helliker's quote in the Lompoc Record, Sunday, November 7, 1999. Helliker was quoted as saying that DPR would not take regulatory action until there was proof that pesticides were impacting human health in Lompoc. Dave questioned what was meant by proof and whether it was possible to satisfy the requirements for proof with actions planned by the LIWG. Helliker replied that the purpose of the LIWG was not to generate evidence; the LIWG is an advisory group to DPR. DPR will determine what the evidence is and formulate policy.

TOPIC #7: Status of funding requests. The LIWG had solicited local city and county government support for LIWG recommended activities (handout #4). The County Board of Supervisors approved a \$25,000 allocation toward the one-year Meteorology Study. The Lompoc City Council also approved \$25,000 toward the one-year Meteorology Study. Note that the following conditions were stipulations on the \$25,000, which was offered to the LIWG by the City:

(1) Only the Meteorology Study will be funded with these funds.

(2) The OEIS performs development and oversight of the contract for the Meteorology Study and its implementation.

- (3) The Mayor will write a letter to the governor or call the governor to urge that the State provide the funding necessary to complete the comprehensive study.
- (4) A representative of the Water Division/Utility Department, Susan Zavolta, is to serve on the OEIS, to monitor the methodology and results and ensure that the work to be done will be of assistance to the City Utility Department. The city will have the ability to review the plan before it is adopted to ensure that it meets the needs of the Utility Department.

The LIWG asked Mayor DeWees for clarification as to whether the City Council would need to review the draft Meteorology Study Plan. Mayor DeWees stated that this would not be required unless staff, Stacy Lawson and Susan Zavolta, identified substantial issues related to the plan's usefulness to the Utility Department.

ACTIONS:

- (1) The LIWG accepted the funding from the County and the City, with the City's conditions for funding and added Susan Zavolta as a member to the OEIS.
- (2) Ray Chavira, with assistance from Stacy Lawson, will chair the OEIS subgroup, serve as the LIWG's contact to coordinate funding of the Meteorology Study, and use John Molitoris' proposal as a template to develop the Meteorology Study Plan.
- (3) Since Traci Verardo no longer works in Senator O'Connell's office, Carla Frisk will replace Traci Verardo on the funding subgroup until Sacramento replaces her on the subgroup.

TOPIC #8: Report on the status of the recommendations on Key Issue #1 [Key Issue #1: Does sickness occur in the community? If so, what kind(s) and at what rate(s)? Are illness rates higher than expected?]

Dick Ames/OEHHA briefed the LIWG on the status of its request for 1995-97 hospital discharge data from Office of Statewide Health Planning and Development (handout #5). The data should be available by the end of November.

ACTIONS:

- (1) Paul Helliker/DPR will contact Office of Statewide Health Planning and Development to follow up on expediting this data to OEHHA.
- (2) By February 2000, Dick Ames will provide the LIWG the data analysis.

Elliot Schulman briefly updated the LIWG on the status of Phase One data analysis: they continue to analyze outpatient data and geocode it. Barbara Harthorn/UCSB provided an informational summary of activities she is conducting at UCSB. Although they do not fall under any LIWG recommendations, these activities may be of interest to LIWG members.

Elliot again raised the issue of scientific limitations regarding the interpretation of health data (handout #6), and suggested that the Key Issue #1 activities stop for the time being to answer the following questions: We don't have money to go further, but if we had money ought we to do the next step? Or should we wait for exposure data? Some LIWG members also expressed concern regarding high rates of childhood cancer in Lompoc. County health officers have forwarded appropriate information to State health officials.

The LIWG discussed the potential for a more representative sample of the population than the 10% already obtained. There is a prospect of accessing diagnostic and spatial data from HMOs Valley Medical and Santa Barbara Medical Foundation Clinics in Lompoc.

The potential of conducting a symptom survey and/or modeling perception of risk were discussed. It was asked whether the USC study of children's respiratory disease could provide some relevant information. There was a recommendation to pursue the additional data from the HMO clinics to better characterize disease in the population.

ACTIONS:

- (1) The LIWG requested that OEHHA develop and submit to the health subgroup for their review and subsequent submission to the LIWG a proposal for a community health survey (linked to collecting exposure data), for which funding would be requested. The LIWG requested that the subgroup respond to these requests at the next LIWG meeting on January 20.
- (2) The LIWG requested that the Health Effects Subgroup re-present and describe the decision tree and where we are on the decision tree, to the full LIWG. In addition, the LIWG should discuss future planned actions and identify the factors that will trigger those actions. The Health Effects Subgroup should answer the following question: Should we immediately begin determining how much money we would need to collect additional clinical diagnosis data from Santa Barbara Medical Foundation Clinic and Valley Medical Clinic and request these funds in the next funding cycle, or should we wait to determine if there is evidence of a significant pesticide exposure after the Phase Two/Fumigant and Phase Two/Other Pesticide monitoring data has been verified before determining if we should proceed to further analysis? In other words, the LIWG should determine if the decision tree still reflects the process it wishes to follow to characterize and further define the identified health effects in the Lompoc Valley. The LIWG requested a response by its next meeting.
- (3) County health has forwarded cancer information to the State. DHS needs to act next; Martha Harnly will check with the Cancer Unit in DHS.

TOPIC #9: Report on the status of the recommendations on Key Issue #3 [Key Issue #3: What other environmental hazards and factors exist in Lompoc?]

Ray Chavira reported on the status of this subgroup's activities on five major issues that remain.

Issue #1: Meteorology. The recommended one-year Meteorology Study is expected to cost approximately \$90,000. The City of Lompoc and Santa Barbara County combined have allocated \$50,000 toward this study. The Department of Pesticide Regulation has committed to providing the additional \$40,000 necessary to complete the study.

The effect of and need for additional information on inversion layers in the Lompoc Valley was discussed. The potential for collecting data that will produce a 3-dimensional wind profile was discussed.

ACTIONS:

- (1) The OEIS needs to identify a lead to administer the Meteorology Study contract.
- (2) The OEIS will begin developing a protocol for a one-year Meteorology Study, in coordination with DPR's Phase Two/pesticide air monitoring study.

Issue #2: Pollen and mold spore survey. The recommended pollen and mold survey, estimated to cost \$21,000, remains unfunded.

Issue #3: Vandenberg Air Force Base (AFB). The Santa Barbara County Air Pollution Control District

provided some additional air toxics emission information. The OEIS also looked into potential emissions from rocket launches. Based on modeling data, the AFB will conduct a launch as long as the predicted data do not exceed air concentrations that are immediately dangerous to life and health. The LIWG expressed a need for more information about these rocket launch emissions. Discussion pointed out that dispersion modeling is used for titan rocket launches from Vandenberg and that emissions include hydrochloric acid and nitrogen tetroxide. The potential to relate launch dates to more complete health data, once it is obtained, was discussed.

ACTIONS:

- (1) The LIWG requests that the City of Lompoc and County Board of Supervisors voice concerns about this issue to area's elected U.S. Representative Lois Capps.
- (2) The LIWG also requests that the City Council draft a letter requesting that Vandenberg AFB present information to the LIWG about its rocket launch emissions.

Issue #4: Crystalline silica monitoring. ARB plans to conduct an ambient air monitoring pilot study for crystalline silica in Lompoc in December or January. Plans are on hold awaiting confirmation that the DHS lab will be able to conduct requested analyses, and that ARB will have sufficient funds to pay for the analyses. The study design consists of collecting 24-hour samples in the western, central, and eastern parts of Lompoc. Samples will be collected on three days. Results will be given to OEHHA for interpretation. ARB requested that OEHHA develop a cancer potency and chronic non-cancer reference exposure level for crystalline silica to support ARB's future consideration for evaluating crystalline silica as a toxic air contaminant. If such an evaluation proceeds, then ARB will conduct additional ambient air monitoring near known sources of crystalline silica emissions.

Issue #5: Radon.

- Radon is the second leading cause of lung cancer in the United States.
- The risk of lung cancer for someone exposed to radon is greatly increased if they smoke.
- The State's Geologist's Office has noted that radon is expected to occur in the Lompoc area, based on localized geology.
- After U.S. EPA dispersal of a limited number of radon test canisters and follow-up testing, radon levels higher than 4 picocuries per liter and up to approximately 24 picocuries per liter were found in Lompoc homes.
- These results confirm the expected situation: radon levels higher than the recommended action level of 4 picocuries per liter can be found in the Lompoc area.
- Unfortunately, the location of homes with higher radon levels cannot be predicted with any certainty and a short-term test for radon is the only way to determine if a home has higher than recommended levels.
- Because radon testing is voluntary, and there are no readily available sources of funding for remediation or regulatory requirements regarding remediation of high radon levels, and because disclosure is required in real estate transactions, testing efforts requiring reporting of results on an individual basis have limited success.
- The City of Lompoc has attempted to bring this potential health hazard to the attention of Lompoc's citizens, through the media and through providing coupons for reduced price radon test kits.
- The American Lung Association of Santa Barbara and Ventura Counties, in cooperation with the State Radon Program Manager and the City of Lompoc, is currently undertaking a campaign to encourage radon testing by providing a low cost radon test kit to residents. Approximately 150 test kits have been distributed. About one-third have been returned, with all valid results falling below 4 picocuries per liter (one was 3 and one was 3.9; two kits were invalid). It is expected that the rest of the kits distributed will be returned by the first of the year.

The OEIS recommends that the LIWG formally recognize that radon hazards do exist in the Lompoc Valley and encourage all residents to undertake a low cost radon test of their homes in order to identify their level of risk.

ACTIONS:

- (1) The LIWG endorsed this recommendation.
- (2) The LIWG requested that the U.S. EPA National Radon Quality Program work within local mechanisms to assist with public education and outreach on this issue.
- (3) The OEIS would like to receive an update in January from the Health Effects Subgroup on the status of the recommendations regarding health effect characterization previously presented to the LIWG and how those recommendations have been integrated into the decision tree and when they are identified to be conducted. (Note: This relates to TOPIC 8, Action Item 1.)

The LIWG thanked Ray Chavira and the OEIS for their hard work on these issues.

TOPIC #10: Report on the status of the recommendations on Key Issue #2 [Key Issue #2: Are Lompoc residents exposed to pesticides in air? If so, which pesticides, and in what amounts? Do those levels exceed human health standards?]

Status of fumigant sampling and analysis plan: Randy Segawa/DPR summarized the progress of Phase Two/Fumigants (see copies of overheads in handout # 7; the draft executive summary and draft fumigant sampling and analysis plan is available on DPR's Web page at www.cdpr.ca.gov by looking under the Programs and Services section. Hard copies are available upon request from DPR free of charge). The LIWG's technical advisory group (TAG) and U.S. EPA are reviewing this draft fumigant sampling and analysis plan. The TAG has several issues to resolve about the fumigant sampling and analysis plan, including questions about the objective (acute vs. subchronic exposure), study design (ambient vs. application monitoring, application selection criteria), weather data (mini-Sodar vs. air samples), limit of detection/quantitation (definition), and study initiation date (now or later).

ACTION: Paul Helliker/DPR put forward the following solution that the LIWG accepted. DPR will commit to making up the shortfall of \$20,000 for the Meteorology Study in the fumigant plan, and will commit \$20,000 of the Phase Two/Other pesticides money to the Meteorology Study on the condition that the TAG submit a revised fumigant sampling and analysis plan to U.S. EPA by December 1, 1999. (Note: With this solution, the \$90,000 necessary for a one-year Meteorology Study will be in place through the \$50,000 from local government and the \$40,000 from DPR.)

Status of monitoring activities – Phase Two/other pesticides: (See handout #7). The TAG prepared a list of 50+ pesticides and distributed a survey to 12 labs nationwide to determine interest and capability. Three labs responded: Battelle, UCD and University of Nevada Reno. Although Battelle and UCD seem most capable, the TAG has not yet discussed this information. The TAG followed up on sulfuryl fluoride. From July 1998 through August 1999, about 380 applications occurred in Lompoc totaling 7,000 pounds. Sulfuryl fluoride is among the top five pesticides in amount applied. The TAG and LIWG need to decide if they want to recommend including structural use of sulfuryl fluoride in Phase Two/other pesticides monitoring project.

TOPIC #11: Next meeting date, time, location, and agenda: The LIWG plans to meet next on Thursday, January 20 from 10 a.m. to 2:00 p.m. at the Department of Health Services in Oakland. Please contact me, or Jake Mackenzie at (707) 584-1195, if you have questions about this meeting summary. Agenda topics will

include:

- Health subgroup report on suggestions, including funding, about community health study
- OEIS progress report, including (1) drafting and implementing Meteorological Study, and (2) VAFB letter
- TAG/DPR and US EPA: final fumigant sampling and analysis plan

Respectfully submitted,

[signed by]

Madeline Brattesani, Ph. D.

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John Sanders, DPR

Attachments

Handouts distributed at the November 8, 1999 meeting (Handouts #3 – 5 were distributed to LIWG members prior to the meeting).

Hard copies will be mailed only to those members not in attendance, or those requesting hard copies.

1. Majewski, M., et al. 1998. Airborne Pesticide Residues along the Mississippi River. Environ. Sci. Technol. 32:3689-3698.
2. Majewski, M. and W. Foreman. 1999. Air Sampling Ambient Air for Pesticide Residues. USGS. Handouts.
3. Letter to the LIWG from Assemblyman Maldonado regarding Steve Jordan's membership on the LIWG (dated 10/12/99).
4. Letters regarding the LIWG's solicitation of local government support for LIWG recommended activities (dated 9 and 10/99)
5. Memo to Joan Denton/OEHHA from DPR and LIWG regarding a request to expedite data transmittal from the Office of Statewide Health Planning and Development (dated 10/14/99).
6. E-mail to LIWG members from Rick Kreutzer/DHS regarding scientific limitations regarding the interpretation of health data (dated 11/3/99).
7. Copies of DPR's overhead transparencies for presentation of status of Phase Two/fumigants and Phase Two/Other pesticides.

Member Distribution List:

Advocates for a Clean Environment/Deb Robinson

Air Resources Board/Lynn Baker

Assembly Member Maldonado's Office/Melanie Bedwell, Julia King

Celite Corporation/Chris Pauley

City of Lompoc/Dick DeWees, Stacy Lawson

Farm Bureau/Steve Jordan

Department of Health Services/Christine Arnesen, Martha Harnly, Rick Kreutzer, Sharon Seidel

Department of Pesticide Regulation/Madeline Brattesani, Lisa Ross, Jim Sanborn, John Sanders, Jay Schreider, Randy Segawa, Pam Wofford

Lompoc Growers/Richard Quandt

Lompoc Resident/Joyce Howerton, Dave Pierce

Office of Environmental Health Hazard Assessment/Richard Ames, Michael DiBartolomeis, Anna Fan, Joy Wisniewski

Santa Barbara County Agricultural Commissioner's Office/Joe Karl

Santa Barbara County Air Pollution Control District/Duane Sikorski

Santa Barbara County Health Care Services/Elliot Schulman

Santa Barbara County Supervisor Gray's Office/Susan Warnstrom

Santa Barbara County Supervisor Marshall's Office/John Buttney

Senator O'Connell's Office/Carla Frisk

UC Extension Agricultural Engineer/Bill Steinke

U.S. EPA, Headquarters/Jake Mackenzie

U.S. EPA, Region IX/Ray Chavira, Karen Heisler

Volunteer/Robert Holtzer (formerly with Office of Environmental Health Hazard Assessment as a Medical Officer)
Volunteers for a Healthy Valley/George Rauh